

What is claimed is:

1. A charge read-out method, comprising the steps of:
moving charges into a plurality of charge transfer
paths disposed on both sides along a row of a plurality
5 of light receiving units arranged linearly, the charges
being generated and stored in the plurality of light
receiving units having received light; and

transferring and outputting the moved charges along
the light receiving paths disposed on both sides of the
10 plurality of light receiving units.

2. A solid-state imaging device, comprising:

a plurality of light receiving units arranged linearly
for receiving light to generate and store charges;

a plurality of charge transfer paths disposed on both
15 sides of said plurality of light receiving units for
receiving the charges stored in said plurality of light
receiving units and for transferring and outputting the
received charges;

a controller for moving the charges stored in said
20 plurality of light receiving units into said plurality of
charge transfer paths, and for transferring and outputting
the charges moved into said plurality of charge transfer
paths disposed on both sides of said plurality of light
receiving units.

25 3. The solid-state imaging device according to claim

2, wherein each of said plurality of light receiving units includes a plurality of segments separated by a potential barrier so that charges stored in said plurality of light receiving units are moved to said plurality of charge transfer paths.

4. The solid-state imaging device according to claim 3, wherein the plurality of segments are four segments obtained by separating each of said plurality of light receiving units with a cruciform potential barrier.